

## **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

### **LISTING OF CLAIMS:**

1. (currently amended): A refractory metal plate comprising an oxide coating layer formed by depositing oxide powder of at least one of, ~~or a mixture of~~ oxide powders of ~~two or more of~~ alumina, silica, zirconia, yttria, titania, magnesia, and calcia to at least one surface of a metal composed of one of molybdenum, tungsten, ~~and an alloy of a molybdenum group alloys~~ and a tungsten group alloys, wherein said oxide coating layer covers the whole of said at least one surface ~~so as to inhibit~~, wherein the exposure of a base material being equal to or less than 1% of a unit area of the oxide coating layer.

2. (original): The refractory metal plate according to claim 1, wherein at least one kind of said oxide powders is set to 10  $\mu\text{m}$  or less, and said oxide coating layer is obtained by implementing a heat treatment at a temperature depending on the grain size of said powder.

3. (original): The refractory metal plate according to claim 1, wherein a thickness of said oxide coating layer is set to 10 to 300 $\mu\text{m}$ .

4. (original): The refractory metal plate according to claim 1, wherein a surface of said oxide coating layer is porous, and a surface roughness thereof is such that  $R_a$  is 20 $\mu\text{m}$  or less and  $R_{\text{max}}$  is 150 $\mu\text{m}$  or less.

5. (original): The refractory metal plate according to claim 1, wherein said metal has a shape of a plate and, in a surface state of the plate as a base plate, a surface roughness thereof is such that  $R_a$  is 20 $\mu\text{m}$  or less and  $R_{\text{max}}$  is 150 $\mu\text{m}$  or less.

6. (original): The refractory metal plate according to claim 1, wherein said oxide coating layer is formed by plasma spraying.

7. (original): The refractory metal plate according to claim 1, wherein said oxide coating layer is formed on a surface of a plate by forming slurry by mixing oxide with a solvent,

painting the slurry with a brush or spraying the slurry on a base material, drying the slurry on the base material, then applying a melting process at a temperature depending on a grain size of the oxides to be deposited.

8. (original): The refractory metal plate according to claim 1, wherein said oxide coating layer is formed by forming an oxide coating layer by the use of a high temperature resistant adhesive, then applying a heat treatment so as to deposit it.

**9. - 12. are cancelled**

13. (original): A setter used in sintering, comprising the refractory metal plate according to claim 1.

14. (currently amended): A refractory metal plate comprising a plate with an oxide coating layer formed by depositing oxide powder of at least one of, ~~or a mixture of~~ oxide powders of ~~two or more of~~ alumina, silica, zirconia, yttria, titania, magnesia, and calcia to at least one surface of said plate, wherein said plate is a molybdenum plate having a composition of 99.9% or more purity and having a high temperature deformation resistant characteristic, and wherein a size of a disk-shaped crystal grain contained inside said molybdenum plate is such that a ratio of a longer diameter relative to a shorter diameter of a disk surface is four or less, a diameter of a disk surface of said molybdenum plate is 15mm to 150mm, and crystal grains account for 1/5 or more of a thickness in a thickness direction of said molybdenum plate, the exposure of a base material being equal to or less than 1% of a unit area of the oxide coating layer.

15. (original): A setter used in sintering, comprising the refractory metal plate according to claim 14.

16. (original): The refractory metal plate according to claim 14, wherein said oxide coating layer is formed by plasma spraying.

17. (original): The refractory metal plate according to claim 14, wherein said oxide coating layer is formed on a surface of a plate by forming slurry by mixing oxide with a solvent, painting the slurry with a brush or spraying the slurry on a base material, drying the slurry on the

base material, then applying a melting process at a temperature depending on a grain size of the oxides to be deposited.

18. (original): The refractory metal plate according to claim 14, wherein said oxide coating layer is formed by forming an oxide coating layer by the use of a high temperature resistant adhesive, then applying a heat treatment so as to deposit it.

**19. - 22. are cancelled**

23. (currently amended): A refractory metal plate comprising a plate with an oxide coating layer formed by depositing oxide powder of at least one of, ~~or a mixture of~~ oxide powders of ~~two or more of~~ alumina, silica, zirconia, yttria, titania, magnesia, and calcia to at least one surface of said plate, wherein said plate has a composition of 0.1 to 1.0wt% lanthanum or lanthanum oxides with the remainder composed of molybdenum, has a structure extending in a substantially fixed direction, and is small in deformation amount at a high temperature, the exposure of a base material being equal to or less than 1% of a unit area of the oxide coating layer.

24. (original): The refractory metal plate according to claim 23, wherein said plate has crystal grains exhibiting an interlocking structure in which the structure extends in a fixed direction so as to be recrystallized, and is excellent in processability and high temperature deformation resistance.

25. (original): A setter used in sintering, comprising the refractory metal plate according to claim 23.

26. (original): The refractory metal plate according to claim 23, wherein said oxide coating layer is formed by plasma spraying.

27. (original): The refractory metal plate according to claim 23, wherein said oxide coating layer is formed on a surface of a plate by forming slurry by mixing oxide with a solvent, painting the slurry with a brush or spraying the slurry on a base material, drying the slurry on the base material, then applying a melting process at a temperature depending on a grain size of the oxides to be deposited.

28. (original): The refractory metal plate according to claim 23, wherein said oxide coating layer is formed by forming an oxide coating layer by the use of a high temperature resistant adhesive, then applying a heat treatment so as to deposit it.

**29. - 32. are cancelled**

33. (original): A setter which is used in sintering and which comprises the refractory metal plate according to claim 24.

34. (original): The refractory metal plate according to claim 24, wherein said oxide coating layer is formed by plasma spraying.

35. (original): The refractory metal plate according to claim 24, wherein said oxide coating layer is formed on a surface of a plate by forming slurry by mixing oxide with a solvent, painting the slurry with a brush or spraying the slurry on a base material, drying the slurry on the base material, then applying a melting process at a temperature depending on a grain size of the oxides to be deposited.

36. (original): The refractory metal plate according to claim 24, wherein said oxide coating layer is formed by forming an oxide coating layer by the use of a high temperature resistant adhesive, then applying a heat treatment so as to deposit it.